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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,524	07/29/2008	Xin Yao	H0678.70013US00	2772
23628 7590 01/30/2009 WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206			EXAMINER ZONG, RUOLEI	
			ART UNIT 4173	PAPER NUMBER
			MAIL DATE 01/30/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,524	<b>Applicant(s)</b> YAO, XIN	
	<b>Examiner</b> RUOLEI ZONG	<b>Art Unit</b> 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/29/07, 10/26/07</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This non-final office action is responsive to the U.S. patent application no. 10/593,524 filed on July 29, 2008.

Claims 1-20 are pending;

Claims 1-20 are rejected.

### ***Claim Objections***

1. Claim 16 is objected to because of the following informalities: "port numbersof" in Line 3 has an error. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Qiao (US Patent Application 2006/0198357 A1).

Re Claim 1, Qiao discloses a method comprising: configuring a proxy processing strategy in a signaling proxy (signaling agent, abstract, line 1); and performing proxy processing on a received message (Para. 009 and Para. 0010. Note that the signaling needs to process the message to decide whether the signaling is concerned with media stream port or not) and forwarding (forwarding, Para. 0011, Line 4) the message after the signaling proxy determining that the message needs to be proxy processed by the signaling proxy according to the configured strategy (Para. 0011).

Re Claim 2, Qiao discloses that said strategy comprises: identifying (message identifier, Para. 0011, Line 5) a received message which needs to be processed by the signaling proxy (signaling agent, abstract, line 1) by one or a combination of any of VPN ID, VLAN ID, MPLS ID, IP protocol type, source IP address, source port, destination IP address (IP address, Para. 0034, Line 3), destination port of the message (Para. 0034).

Re Claim 3, Qiao discloses that the method further comprises: in the signaling proxy (signaling agent, abstract, line 1), setting (replaced, Para. 0039, Line 7) destination address (relevant media stream network address, Para. 0039, Line 6) of a message to be proxy processed by the signaling proxy to be a local address (corresponding network address, Para. 0039, Line 8).

Re Claim 4, Qiao discloses the method further comprising: when receiving a message from a proxied side, the signaling proxy determines that the message needs to be processed according to information of its destination address (Para. 009 and Para.

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0010. Note that the signaling needs to process the message to decide whether the signaling is concerned with media stream port or not); replacing destination address (relevant media stream network address, Para. 0039, Line 6) of the received message with a server address and source address with a server side address (corresponding network address, Para. 0039, Line 8) of the signaling proxy respectively, and forwarding the message (Para. 0039).

Re Claim 5, Qiao discloses that wherein after receiving a message sent from the server (media gateway, 0040, Line 1), the signaling proxy (signaling agent, abstract, line 1) replaces source address (media information, Para. 0041, Line 5) of the message sent from the server with destination address (corresponding network address, Para. 0041, Line 6) of said original message sent from the signaling proxy and destination address (media information, Para. 0041, Line 5) of the message sent from the server with a proxied side address (corresponding network address, Para. 0041, Line 6) respectively, and forwards (sends, Para. 0041, Line 8) the message.

Re Claim 6, Qiao discloses that wherein said signaling proxy processing comprises: changing (replaced, Para. 0039, Line 7) source (relevant media stream network address, Para. 0039, Line 6) and destination addresses (corresponding network address, Para. 0039, Line 8) and port numbers (Note that IP address and port of the media gateway controller configured on the media gateway MG2 is the second network address in Para. 0033, Line 5-7, therefore, port is disclosed as a part of network address) of the received message, replacing data of the application layer,

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updating a signaling state and/or creating session table (forwarding table, Para.0039, Line 5) items.

Re Claim 7, Qiao discloses wherein before the signaling proxy receives a message, a forwarding strategy is configured in a network device (signaling agent, abstract, line 1) through which a message sent by a proxied side passes (Para. 0033. Note that Agent equipment has at least two network addresses, therefore forwarding strategy configuration is implicitly disclosed), the forwarding strategy stipulating that a forwarding path of the message to be processed passes through the corresponding signaling proxy (Para. 0039).

Re Claim 8, Qiao discloses wherein when the network device (signaling agent, abstract, line 1) receives a message which is sent from the proxied side and needs to be processed, it forwards the message to the signaling proxy (signaling agent, abstract, line 1) according to the forwarding strategy (note that Para. 0039 and “multiple agent equipments may realize the media gateway traversing through multiple networks for many times, stage by stage”, Para. 0063, Line 14-16, therefore, the strategy of forwarding to signaling proxy with multiple signaling proxies is disclosed).

Re Claim 9, Qiao discloses that wherein in the signaling proxy (signaling agent, abstract, line 1), information of the forwarding path of the message returned from the server is obtained in a configuration or study way and recorded (Para. 0041); after the signaling proxy (signaling agent, abstract, line 1) receives the message returned from the server, it forwards the message according to the recorded information (forwarding table, Para. 0041, Line 4) of the forwarding path.

Re Claim 10, Qiao discloses that wherein said network device is configured to be a default gateway (signaling agent, abstract, line 1. Note that “Agent equipment 1 has at least two network addresses, in which one is a first network address in network 1 of the media gateway controller MGC side, and other one is a second network address in network 2” in Para. 0033, Line 1-4, therefore Agent equipment 1 is a gateway of network 2) of the signaling proxy (signaling agent, abstract, line 1), and when the signaling proxy receives the message returned by the server, it processes said message and sends the processed message to the default gateway (Para. 0041).

Re Claim 11, Qiao discloses an apparatus comprising: a unit (agent equipment, Para. 0033, Line 1) for receiving and recognizing messages, which is configured with a proxy processing strategy, used to recognize a message which needs to be processed (Para. 0010 and Para. 0011. Note that the signaling needs to process the message to decide whether the signaling is concerned with media stream port or not); a unit (agent equipment, Para. 0033, Line 1) for processing messages, which processes said message that needs to be processed (Para. 0011); and a unit (agent equipment, Para. 0033, Line 1) for forwarding (forwarding, Para. 0011, Line 4) messages, which forwards (forwarding, Para. 0011, Line 4) the processed message to a corresponding server.

Re Claim 12, Qiao discloses that wherein said proxy processing strategy comprises: identifying (message identifier, Para. 0011, Line 5) a received message which needs to be processed by the signaling proxy (agent equipment, Para. 0033, Line 1) by one or any combination of VPN ID, VLAN ID, MPLS ID, IP protocol type, source IP

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address, source port, destination IP address (IP address, Para. 0034, Line 3), destination port of the message (Para. 0034).

Re Claim 13, Qiao discloses that wherein the signaling proxy (agent equipment, Para. 0033, Line 1) processing comprises: changing (replaced, Para. 0039, Line 7) source (relevant media stream network address, Para. 0039, Line 6) and destination IP addresses (corresponding network address, Para. 0039, Line 8) and port numbers (Note that IP address and port of the media gateway controller configured on the media gateway MG2 is the second network address in Para. 0033, Line 5-7, therefore, port is disclosed as a part of network address) of the received message, replacing the data of the application layer, updating a signaling state and/or creating session table (forwarding table, Para.0039, Line 5) items.

Re Claim 14, Qiao discloses that wherein after the signaling proxy (agent equipment, Para. 0033, Line 1) receives the message, it replaces source address (media information, Para. 0041, Line 5) of the message with destination address (corresponding network address, Para. 0041, Line 6) of said original message sent from the proxied side and destination address (media information, Para. 0041, Line 5) of the message sent from the server with the proxied side address (corresponding network address, Para. 0041, Line 6) respectively, and forwards (sends, Para. 0041, Line 8) the message according to the replaced addresses.

Re Claim 15, Qiao discloses the method further comprising: when receiving a message from a proxied side, the signaling proxy (signaling agent, abstract, line 1) determines that the message needs to be processed according to information of its



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destination address (); replacing (replaced, Para. 0039, Line 7) destination address (relevant media stream network address, Para. 0039, Line 6) of the received message with a server address (corresponding network address, Para. 0039, Line 8) and source address (relevant media stream network address, Para. 0039, Line 6) with a server side address (corresponding network address, Para. 0039, Line 8) of the signaling proxy respectively, and forwarding (forwarded, Para. 0039, Line 10) the message.

Re Claim 16, Qiao discloses that wherein said signaling proxy (signaling agent, abstract, line 1) processing comprises: changing (replaced, Para. 0039, Line 7) source (media stream network address, Para. 0039, Line 6) and destination IP addresses (corresponding network address, Para. 0039, Line 8) and port numbers (Note that IP address and port of the media gateway controller configured on the media gateway MG2 is the second network address in Para. 0033, Line 5-7, therefore, port is disclosed as a part of network address) of the received message, replacing data of the application layer, updating a signaling state and/or creating session table (forwarding table, Para.0039, Line 5) items.

Re Claim 17, Qiao discloses that wherein before the signaling proxy receives a message, a forwarding strategy is configured in a network device (signaling agent, abstract, line 1) through which a message sent by a proxied side passes (Para. 0033. Note that Agent equipment has at least two network addresses, therefore forwarding strategy configuration is implicitly disclosed), the forwarding strategy stipulating that a forwarding path of the message to be processed passes through the corresponding signaling proxy (Para. 0039).

Re Claim 18, Qiao discloses that wherein when the network device receives a message which is sent from the proxied side and needs to be processed, it forwards the message to the signaling proxy (signaling agent, abstract, line 1) according to the forwarding strategy (note that Para. 0039 and “multiple agent equipments may realize the media gateway traversing through multiple networks for many times, stage by stage”, Para. 0063, Line 14-16, therefore, the strategy of forwarding to signaling proxy with multiple signaling proxies is disclosed).

Re Claim 19, Qiao discloses that wherein in the signaling proxy (signaling agent, abstract, line 1), information of the forwarding path of the message returned from the server is obtained in a configuration or study way and recorded (Para. 0041); and after the signaling proxy (signaling agent, abstract, line 1) receives the message returned from the server, it forwards the message according to the recorded information (forwarding table, Para. 0041, Line 4) of the forwarding path.

Re Claim 20, Qiao discloses that wherein said network device is configured to be a default gateway (signaling agent, abstract, line 1. Note that “Agent equipment 1 has at least two network addresses, in which one is a first network address in network 1 of the media gateway controller MGC side, and other one is a second network address in network 2” in Para. 0033, Line 1-4, therefore Agent equipment 1 is a gateway of network 2) of the signaling proxy (signaling agent, abstract, line 1), and when the signaling proxy receives the message returned by the server, it processes said message and sends the processed message to the default gateway (Para. 0041).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akman is cited to show various systems related to network address translation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUOLEI ZONG whose telephone number is (571)270-7522. The examiner can normally be reached on Monday-Friday, 7:30AM-5:00PM, 5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on (571)272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jinhee J Lee/  
Supervisory Patent Examiner, Art Unit 4173

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/R.Z./